

## Electrical and Acoustical Parameter

Rated Voltage (Vo-p) *	3.0
Operating Voltage (Vo-p)	2.0 – 4.0
Coil Resistance (Ω)	17+/-3
Max Operating Current (mA) *	max. 90
Sound Pressure Level (dBA/10cm) *	min. 70
Resonance Frequency (Hz)	4000

Remark: \*Applying rated voltage (Resonant frequency, Square wave)

## Mechanical, Environmental Parameter

Contact / Wire	Pad
Operating Temperature (°C)	-20 to +70
Storage Temperature (°C)	-30 to +80
Material Housing	LCP
Color Housing	Black
Component Weight (g)	0.1

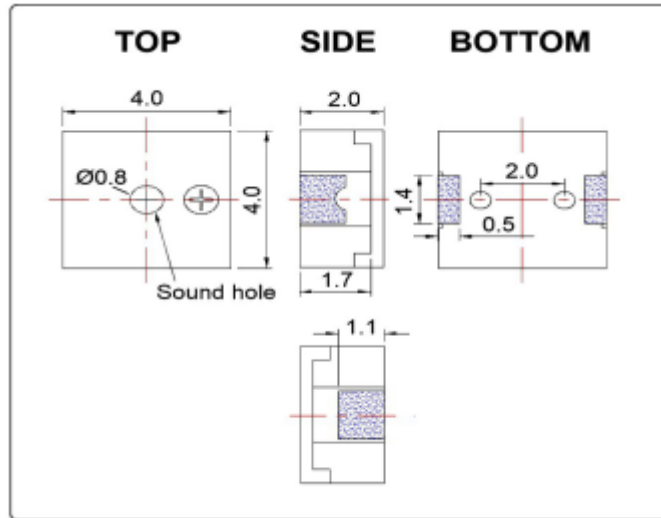
Remark:

## Approval

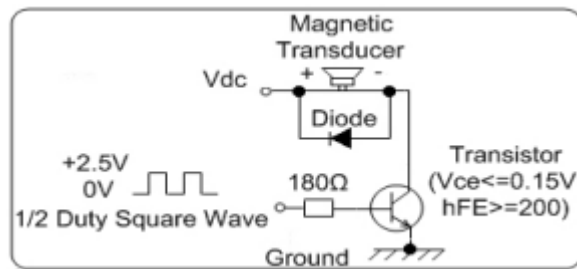
RoHs	<input checked="" type="checkbox"/>
UL	<input type="checkbox"/>

Designed by	MZ	27.11.2014	Dimensions without tolerance ±0.5mm	Index: 01	Current date
Released by	CB	27.11.2014	Drawing number	<b>141127.1PSO</b>	27.11.2014
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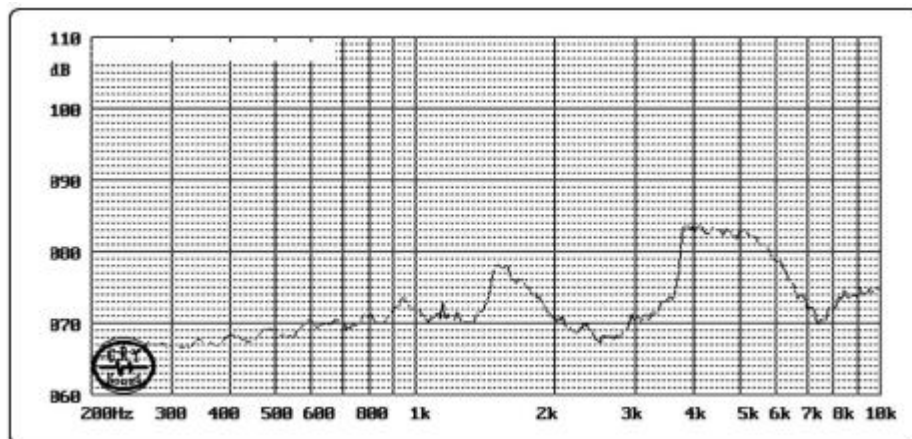
## Drawing of Component



## Recommended Circuit

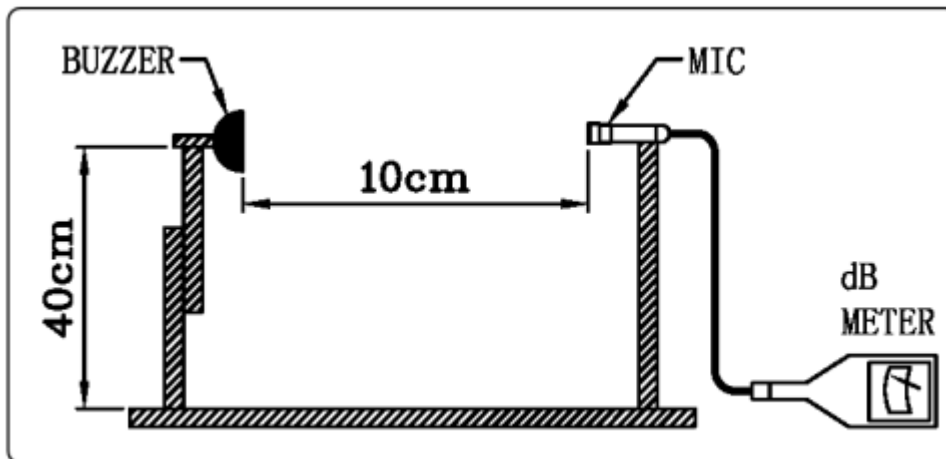


## Frequency Response



Designed by	MZ	27.11.2014	Dimensions without tolerance $\pm 0.5mm$	Index: 01	Current date
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## Measuring Condition



## Reliability Test

### a) HIGH TEMPERATURE TEST

After exposure at  $+70 \pm 2^\circ\text{C}$  for 96 hours and room temperature for 2 hours, the value of frequency/current/SPL should meet specifications shown in page 2.

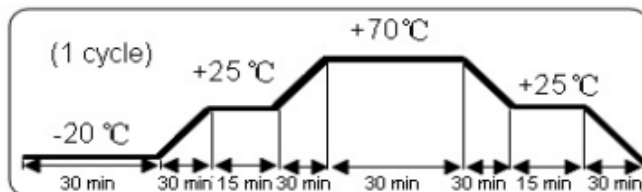
### b) LOW TEMPERATURE TEST

After exposure at  $-20 \pm 2^\circ\text{C}$  for 96 hours and room temperature for 2 hours, the value of frequency/current/SPL should meet specifications shown in page 2.

### c) HUMIDITY TEST

$25 \pm 2^\circ\text{C}$ , 90-95%RH, 5hr=>up to  $55 \pm 2^\circ\text{C}$ , 90-95%RH, 0.5hr => $55 \pm 2^\circ\text{C}$ , 90-95%RH, 5hr=>down to  $25 \pm 2^\circ\text{C}$ , 90-95%RH, 0.5hr, 10 cycles

### d) THERMAL SHOCK TEST



After exposure to above temperature cycle for 5 times and room temperature for 2 hours, the value of frequency/current/SPL should meet specifications shown in page 2.

### e) VIBRATION TEST

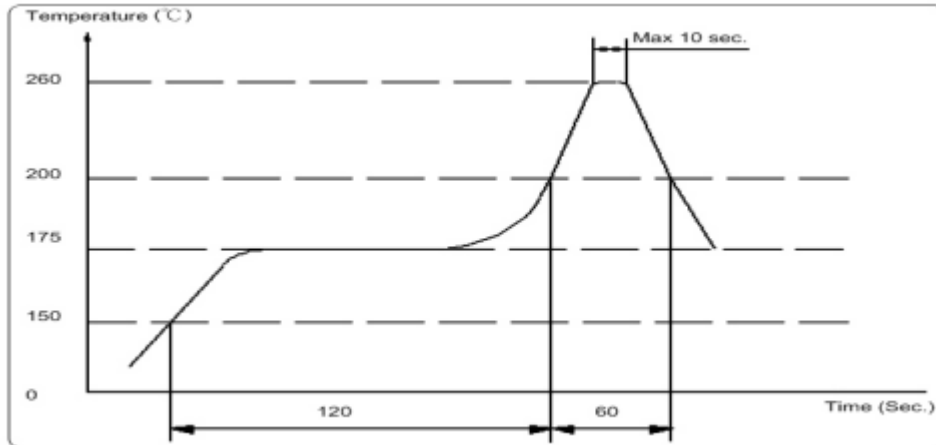
After vibrating the object with 1.5mm amplitude at 10 - 50 Hz in 3 perpendicular directions for 2 hours each, the value of frequency/current/SPL should meet specifications shown in page 2.

### f) DROP TEST

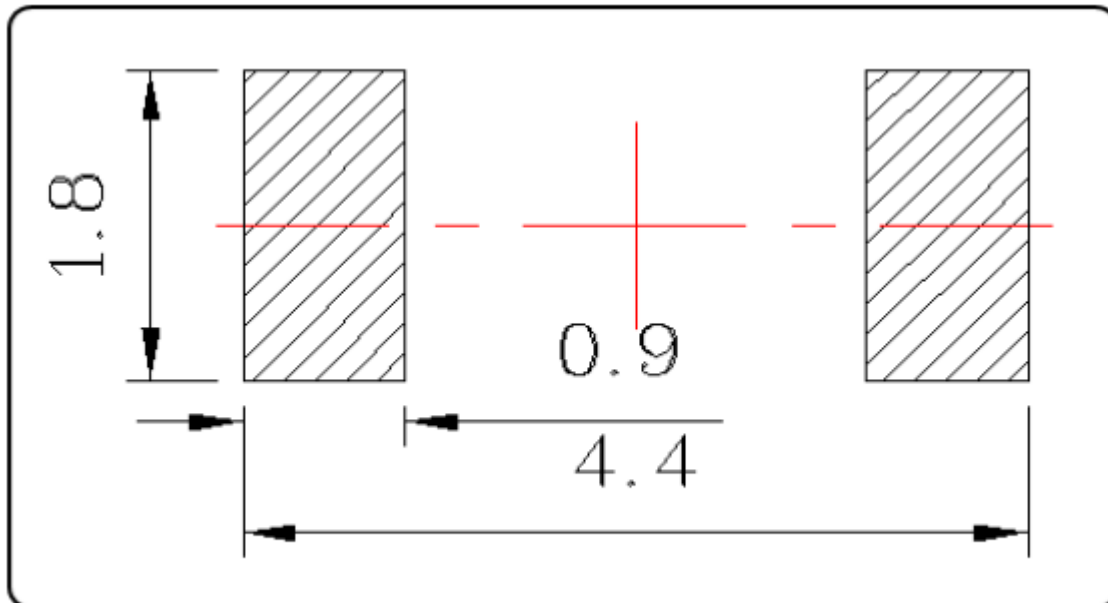
After Dropping naturally from 700mm height onto the surface of 10mm wooden board with 3 directions, the value of frequency/current/SPL should meet specifications shown in page 2.

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## Recommended Reflow Profile

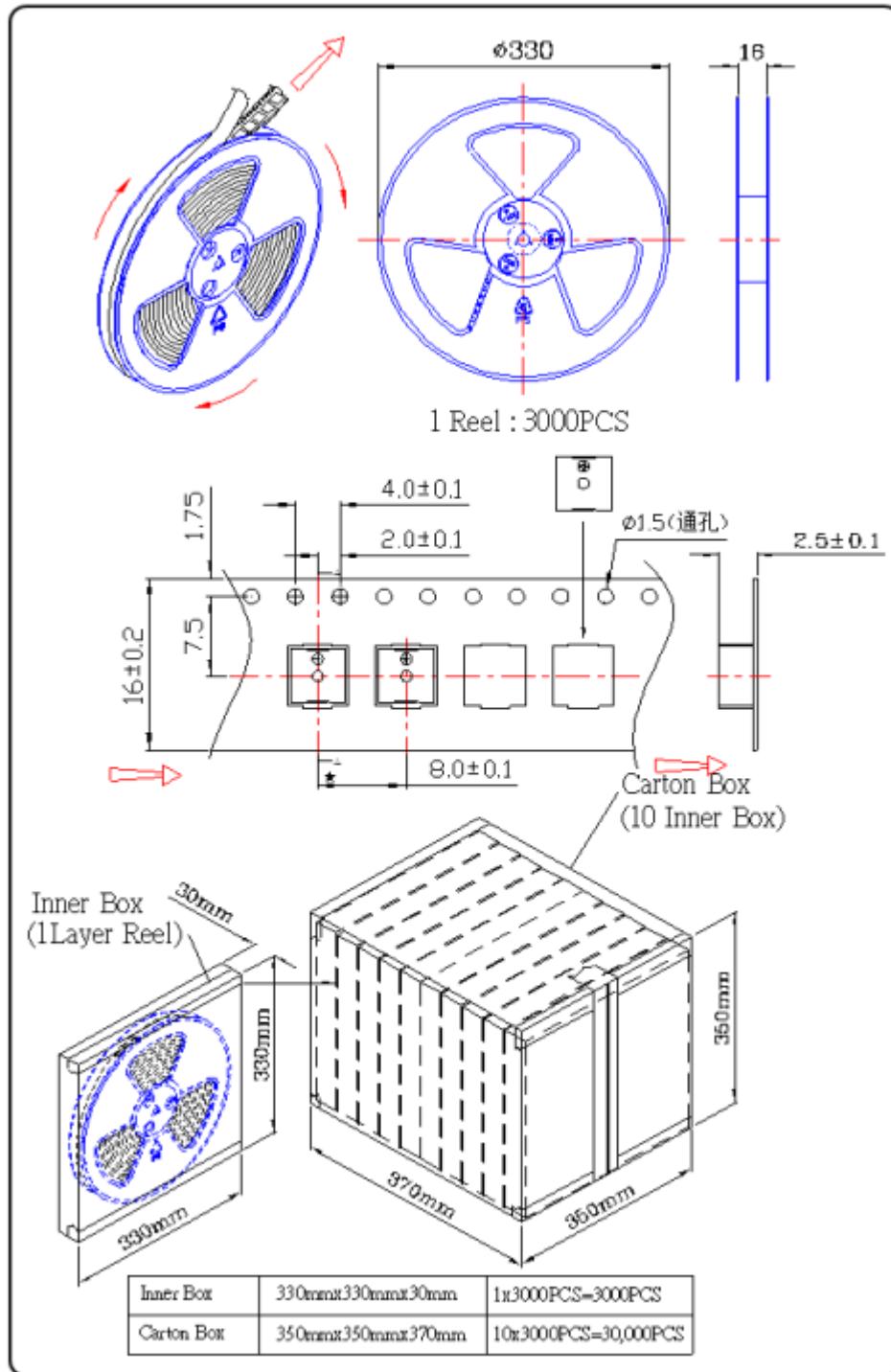


## Recommended PCB Land Pattern



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## Packaging Information



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## Revision Table

Index Nr.	Date Reason - Procedure Change description	Drawing Date	implementation	Comments
			LS-Nr.: Date	

Designed by	MZ	27.11.2014	Dimensions without tolerance ±0.5mm	Index: 01	Current date
Released by	CB	27.11.2014	Drawing number <b>141127.1PSO</b>		27.11.2014
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